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Client/Matter: 071469-0304322

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method of controlling a temperature of a plasma chamber wall comprising:

controlling the temperature of a plurality of segments of the wall or other surfaces exposed to the plasma with a plurality of temperature control systems of a first type; and

controlling the temperature of a plurality of segments of the wall or the other surfaces with a plurality of temperature control systems of a second type different from the first type.

2. (Withdrawn) A method as in claim 1 wherein the second type of control system has a faster thermal response than the first type of control system.

3. (Withdrawn) A method as in claim 1, wherein the second type of control system has a higher resolution thermal response than the first type of control system.

4. (Withdrawn) A method as in claim 1 further comprising measuring the temperature of at least a portion of the wall or the other surfaces with the temperature control system of the second type.

5. (Withdrawn) A method as in claim 1 wherein the temperature control systems of the first type comprise fluid circulation systems.

6. (Withdrawn) A method as in claim 1 wherein the temperature control systems of the second type comprise thermoelectric devices.

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7. (Withdrawn) A method as in claim 6 further comprising measuring heat flux using the thermoelectric devices.

8. (Withdrawn) A method as in claim 7 further comprising correlating the measured heat flux to values in a look-up table to obtain an estimated process parameter and; adjusting at least one of the temperature control systems of a first type and the temperature control systems of a second type based on the estimated process parameter.

9. (Withdrawn) A method as in claim 8 wherein the process parameter is uniformity.

10. (Withdrawn) A method as in claim 1 further comprising comparing a measured temperature distribution to values stored in a look-up table to determine process uniformity.

11. (Withdrawn) A method as in claim 10 wherein the look-up table is provided through a design-of-experiments approach.

12. (Withdrawn) A method as in claim 1 further comprising:  
measuring the temperature of at least a portion of the wall or other surfaces; and  
using the measured temperature of the wall or other surfaces to control the temperature control systems.

13. (Currently Amended) A plasma chamber temperature control, for use with a plasma chamber having a wall ~~or other surfaces~~ exposed to the plasma, comprising:  
a plurality of ~~first temperature control systems of a first type~~ temperature controllers in thermal communication with the plasma chamber wall ~~or the other surfaces~~, the plurality of first temperature controllers each defining at least one fluid conduit therethrough; and

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a plurality of ~~second temperature control systems of a second type different from the first type~~ controllers disposed in thermal communication with the plasma chamber wall ~~or the other surfaces~~, the plurality of second temperature controllers being disposed adjacent to the plurality of first temperature controllers and comprising thermoelectric devices.

14. (Currently Amended) A plasma chamber temperature control as in claim 13, wherein the ~~second type of control systems include thermoelectric devices~~, plurality of second temperature controllers are disposed between at least selected ones of the first temperature control systems of the first type controllers and the plasma chamber wall ~~or the other surfaces~~.

15. (Currently Amended) A plasma chamber temperature control as in claim 13, wherein the plurality of first type of temperature control systems include controllers comprise temperature controlling blocks.

16. (Original) A plasma chamber temperature control as in claim 15, wherein the temperature controlling blocks are thermally insulated from each other.

17. (Currently Amended) A plasma chamber temperature control as in claim 15, wherein each temperature controlling block ~~has a~~ defines the at least one fluid conduit therethrough.

18. (Currently Amended) A plasma chamber temperature control as in claim 13, further comprising a fluid supply in fluid communication with the first temperature control systems of the first type controllers to enable circulation of a fluid therethrough.

19. (Original) A plasma chamber temperature control as in claim 18, wherein the temperature control system further comprises a heater to enable heating of the fluid, and a relatively colder fluid supply, and a valve, the valve being selectively operable to allow selective fluid flow from at least one of the fluid supply and the colder fluid supply.

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20. (Original) A plasma chamber temperature control as in claim 19, wherein the heaters are electrically controllable.

21. (Original) A plasma chamber temperature control as in claim 18, wherein the fluid supply further comprises a relatively hotter fluid supply and a relatively colder fluid supply, and a valve, the valve being selectively operable to allow fluid flow from one of the hotter fluid supply and the colder fluid supply.

22. (Original) A plasma chamber temperature control as in claim 21, wherein the valve is further selectively operable to allow fluid flow from a combination of the hotter fluid supply and the colder fluid supply.

23. (Withdrawn) A method of controlling a plasma process comprising:  
processing a substrate with a plasma within a plasma chamber having a wall or other surfaces exposed to the plasma;  
controlling the temperature of a plurality of segments of the wall or the other surfaces with a plurality of temperature control systems of a first type;  
controlling the temperature of a plurality of segments of the wall or the other surfaces with a plurality of temperature control systems of a second type different from the first type;  
measuring the temperature of at least a portion of the wall or the other surfaces;  
adjusting a parameter of the plasma process by adjusting the temperature control systems.

24. (Withdrawn) A method as in claim 23, wherein the second type of temperature control systems have a faster thermal response than the first type of temperature control systems.

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25. (Withdrawn) A method as in claim 23, wherein the second type of temperature control systems have a higher resolution thermal response than the first type of temperature control systems.

26. (Withdrawn) A method as in claim 23, wherein the measuring is performed using at least one of the temperature control systems of the second type.

27. (Currently Amended) A plasma chamber comprising:  
a chamber having a wall ~~or other surfaces~~ exposed to the plasma;  
a plurality of temperature controlling blocks disposed in thermal communication with the plasma chamber wall ~~or the other surfaces~~, each temperature controlling block having a fluid conduit therethrough;  
a plurality of thermoelectric devices, disposed between at least selected ones of the temperature controlling blocks and the plasma chamber wall ~~or the other surfaces~~; and  
a fluid supply in fluid communication with the conduits to enable circulation of a fluid therethrough.

28. (Original) A plasma chamber as in claim 27, wherein the temperature controlling blocks are thermally insulated from each other.

29. (Original) A plasma chamber as in claim 27, wherein the temperature controlling blocks are disposed outside of the plasma chamber.

30. (Withdrawn) A plasma chamber temperature control, for use with a plasma chamber having a wall or other surfaces exposed to the plasma, comprising:

a plurality of temperature control systems disposed in thermal communication with the plasma chamber wall or the other surfaces, each temperature control system being independently controllable.

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31. (Withdrawn) A method of controlling a plasma process comprising:  
independently controlling the temperature of a plurality of segments of the plasma  
chamber wall or other surfaces exposed to the plasma.